



### **Enhancement Activities**

Enhancements activities refer to actions that provide resource benefits beyond the level prescribed by NRCS Conservation Practice Standards. Once implemented Enhancement Activities should result in an observable or measurable improvement to the condition of one or more of the soil, water, air, plant, or animal resources, or provide for more efficient resource utilization and/or energy conservation.

### **Enhancement Activity Benefits**

Enhancement activities associated with Nutrient Management such as applying nitrogen

fertilizers using split applications, utilizing annual soil and manure testing, using precision agricultural techniques, or utilizing cover crops can result in the following benefits to the producer and the environment:

- Cleaner ground and surface water
- Reduced costs
- Improved soil health
- Improved yields

### **CSP Payments**

You can earn payments by participating in any of the following activities:

- Optimizing application of lime and fertilizer using precision agriculture techniques.
- Minimize nitrogen losses and amount needed by applying nitrogen using side dress or split application methods.
- Utilizing annual soil test results to maximize production and reduce nutrient losses.
- Utilizing legume cover crops to provide nitrogen, crop residue, and plant diversity.

**Client's Acknowledgement Statement:**

I have elected to use the following Nutrient Management activities and understand the requirement of the selected activities (Check all that apply):

- ☐ To optimize application of lime and fertilizer using precision agriculture techniques.
- ☐ To minimize losses and amount of nutrients applied by using side dress or split applications.
- ☐ Utilize annual soil test results to maximize production and reduce nutrient losses.
- ☐ Utilize legume cover crops to provide nitrogen, crop residue, and plant diversity.

I agree that the following information will be provided to NRCS upon request:

- Written documentation of the activity performed (use attached worksheets or equivalent).
- Copies of dated receipts for equipment or services purchased.

I understand that it is my responsibility to obtain all necessary permits and to comply with all ordinances and laws pertaining to the application of these activities.

Accepted by: /s/ \_\_\_\_\_ Date: \_\_\_\_\_

**NUTRIENT MANAGEMENT (CSP Enhancements)**  
**Enhancement Activity Jobsheet**

**February 2006**  
**MS-CSP-ENM-JS**

**Certification by NRCS:**

I have completed a review of the information provided by the client and certify this activity has been applied.

Activity	Name and Title	Date

Name: \_\_\_\_\_

**Job sheet 04 – Adopt Precision Agriculture Techniques**

**Payment = \$6.00/acre/crop year to use precision ag techniques** (grid soil sampling, yield monitoring and GPS controlled guidance and delivery systems to optimize the application of lime and fertilizer. Payments will be made when at least 3 of these four major components are used on an annual basis. The application of all nutrients will be based on soil test analyses that are less than 24 months old.

- **Global Positioning System (GPS) receiver** - Using Earth-orbiting satellites GPS receivers translate radio signals into precise geographic coordinates on the targeted cropland.
- **Yield monitoring Systems (YMS)** - Yields in the field are measured using combine-mounted sensors or volume meters. A GPS receiver mounted on the combine supplies coordinates so that estimates of yields can be assigned to small areas of a field to create a yield map.
- **Digital Soil Map (DSM)** - Fields divided into grid cells of approximately 2-3 acres are soil sampled and the data from each cell is transferred to a digital map that is then used to manage precise fertilizer and/or lime input applications.
- **Variable Rate Application Technologies (VRT)** - Computer-controlled equipment continually adjusts fertilizer and/or lime applications based on soil grid data. The GPS receiver enables the computer to recognize where it is in the field and adjust the types and amounts of inputs according to the soil fertility maps.

Use this (or similar) table to document where Precision Ag techniques are used.

Tract & Field #s	Acres	Crop Grown	Type of System and Components Used	Crop Year Used
T123 Field 4	180	Corn	AutoTrac, VRT, YMS, GPS	2004

Attach receipts for precision ag equipment or services

**Precision Agriculture Techniques Certification**

I certify that I have used at least 3 of the 4 Precision Agriculture techniques to apply fertilizer and/or lime on the fields listed in the table above.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**NUTRIENT MANAGEMENT (CSP Enhancements)**

**February 2006**

**Enhancement Activity Jobsheet**

**MS-CSP-ENM 01-JS**

Name: \_\_\_\_\_

**Job sheet ENM01 – Side Dress and/or Split Application of Nitrogen**

**Payment = \$4/Acre/crop year to use side dress and/or split applications of nitrogen in crop and grass management systems.**

To minimize losses and amounts apply nitrogen using side dress or split applications. Apply nitrogen in increments just prior to plant need. Apply a minimum of at least two applications per crop. The application of all nutrients will be based on soil test analyses that are less than two 24 months old. Follow the Nutrient Management 590 standard.

Use this (or similar) table to document location, date, and nitrogen application amounts.

Tract & Field #s or Names	Acres	Crop	Date and amount of 1 <sup>st</sup> application	Date and amount of 2 <sup>nd</sup> application
T486-1	120	Cotton	30 lb – 4/15	60 lbs – 6/1

**Side Dress and/or Split Application of Nitrogen Certification**

I certify that I have used side dress and/or split applications of nitrogen on the field(s) listed in the table above.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

**Job sheet ENM07 –Annual Soil Test**

**Payment = \$3/Acre/year to utilize results of analysis of annual soil tests** to maximize production, minimize nutrient application rates and reduce nutrient losses.

The intent of this enhancement is to promote the utilization of annual soil test results to maximize production and reduce nutrient losses. Eligible acres include cropland and hayland. Nutrient applications for each crop will be based on annual soil test results and recommendations developed by the Extension Service soils lab at Mississippi State University or other accepted certified laboratories. **Actual nutrient application must range within 10% of the soil test analysis recommended amount.** Where animal manures are used as nutrient sources, the source materials will be laboratory analyzed for nutrient content at least annually. Follow the Nutrient Management 590 standard.

Use this (or similar) table to document location and soil testing results used to customize nutrient inputs.

Tract & Field #s	Acres	Crop Grown	Date of Test Utilized	Crop Year
T123 Field 3	80	Cotton	3/15/04	2004

Attach soil test results for the fields listed above.

**Soil Test Certification**

I certify that I have tested the soil and have adhered to the test results to customize nutrient applications on the fields listed in the table above.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

**Job sheet ENM21 – Utilize Legume Cover Crops**

**Payment = \$5.00/Acre for the use of legume cover crops to provide nitrogen, crop residue, and plant diversity in row crop systems.**

The intent of this enhancement is to utilize legume cover crops as a source of nitrogen, crop residue, and plant diversity. Clovers and vetches are the two most common legumes to use as cover crops. **Legume cover crops cannot be harvested** in any manner. Follow the Nutrient Management 590 and Cover Crop 340 standards. The application of all nutrients will be based on soil test analyses that are less than 24 months old.

Use this (or similar) table to document the location, date, acres, and legume cover crop grown.

Tract & Field #s	Acres	Row Crop Grown	Legume Cover Crop	Crop Year
T123 Field 3	80	Cotton	Crimson Clover	2004

**Use of Legume Cover Crop Certification**

I certify that I have used legume cover crops on the field(s) listed in the table above.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Job sheet ENM11 – Band Application of Nitrogen**

Payment = \$5.00 / Acre / Year to apply nutrients using side dress and/or band application according to crop needs.

The application of plant nutrients will be based on current soil test results and recommendations developed by the Extension Service soils lab at Mississippi State University or private industry if the private industries soils lab participates in the North American Proficiency Testing Program. All nitrogen fertilizers are zone-placed or banded. Appropriate timing and/or method are used to maximize efficiency including side-dress (growing season only) and split application (spring and growing season only). Split application for nitrogen in small grain is at planting time and late winter to early spring. Nitrogen is applied at varying rates on each soil test area, depending on soil test levels in each sampling area.

Soil samples will be collected and prepared according to Mississippi State University Extension Service guidelines or standard agronomic practices. Maximum soil test depth will be six (6) inches.

**Documentation Required:** Farmer or crop consultant certification of nitrogen application using side dress and/or zone (band) application according to crop needs. An example is provided to assist you.

Tract & Field #s or Names	Acres	Crop	Rate/ Nutrient	Application method	1 <sup>st</sup> date applied	Last Date Applied
T486 - 1	20	corn	120/N	Side-dress	4/15/05	6/1/05